STAR 2003

A UNM-Lockheed Martin-Sandia National Laboratories Partnership

Overall Goal:

The goal of the STAR program is to provide an opportunity for highly motivated, high performing high school students to work closely with world class engineers, scientists, and faculty in a research based summer program. This program will enable students to earn college credit while gaining real world work experience in a technical field.

About the Program:

The STAR program is a research based, non-residential mentorship program funded by Lockheed Martin Corporation and administered and designed by the University of New Mexico College of Engineering and Sandia National Laboratories.

STAR apprentices participate in an intensive eight-week program that matches each student with a scientist or engineer working in an area of interest to the student. In addition to the work experience, the students will participate in a class offered through the College of Engineering covering a wide variety of technical topics, field trips, and hands-on experiences.

The apprenticeship experience:

During the apprenticeship, students have the opportunity to

- Conduct meaningful research as part of a team
- Interact with mentors and potential role models in a professional work environment
- Interact with other students with similar interests
- Enhance oral and written communications and computer skills

Apprentices will also prepare a final written and oral report on their work as part of their assignment.

Apprentices are expected to be available for work and class everyday for the entire 8-week session. Other commitments that conflict with this program would need to be changed if the student wants to participate.

Eligibility criteria:

For consideration in this program, applicant must

- Be a United States citizen at the time of application
- Be at least 16 years of age
- Be enrolled in high school and completed 11^{th} grade by the start of the program
- Be returning to his or her school in the fall as a senior

- Have completed at least one semester of algebra, one semester of geometry, and one year of biology, chemistry, or physics with a grade of B or better in each class
- Speak and write English at a level that does not require significant assistance
- Be willing, if chosen as a finalist, to participate in a formal interview process and submit a completed "condition of health" questionnaire
- Be committed to full participation throughout the entire eight-week program
- Have demonstrated a significant interest in a career in science or engineering

Application Process:

A complete application includes the following:

- A completed resume:
    - Written on white paper in a plain font
    - Brief statement of work objectives
    - High school education
    - Cumulative grade point average
    - Work experience (paid and non-paid)
    - Extracurricular activities
- A current (unofficial) transcript that includes grades in the required courses
- A 250 word (one page approximately) typed or legibly written essay describing:
    - Personal expectations of the apprenticeship
    - Career and research interests
    - How participation in the apprenticeship program will add to your personal and academic development
    - A personal challenge you have faced or are facing and how you overcame it or are overcoming it.
- Two letters of recommendation, one of which must be from a current math or science teacher.

Selection and notification:

All applications are screened for eligibility; all eligible applicants' qualifications will be reviewed to identify the pool of finalists. Each finalist then participates in an interview conducted by Sandia National Laboratories staff. The finalists whose qualifications, backgrounds, and interview results best match the overall goals of the STAR program will be offered apprenticeships, subject to availability.

All those selected for the program will have to undergo a thorough background investigation enabling them to be issued a security clearance. Any individual unable to pass the background investigation and secure the proper clearance will not be allowed to participate in the program.

Financial Benefits:

A taxable wage of approximately $7.00 per hour for an estimated forty-hour workweek will be paid during the apprenticeship.